

O. B. PERKINS.

CLAMP.

APPLICATION FILED APR. 10, 1908.

Patented Jan. 5, 1909.

908,884.

Fig. 1.

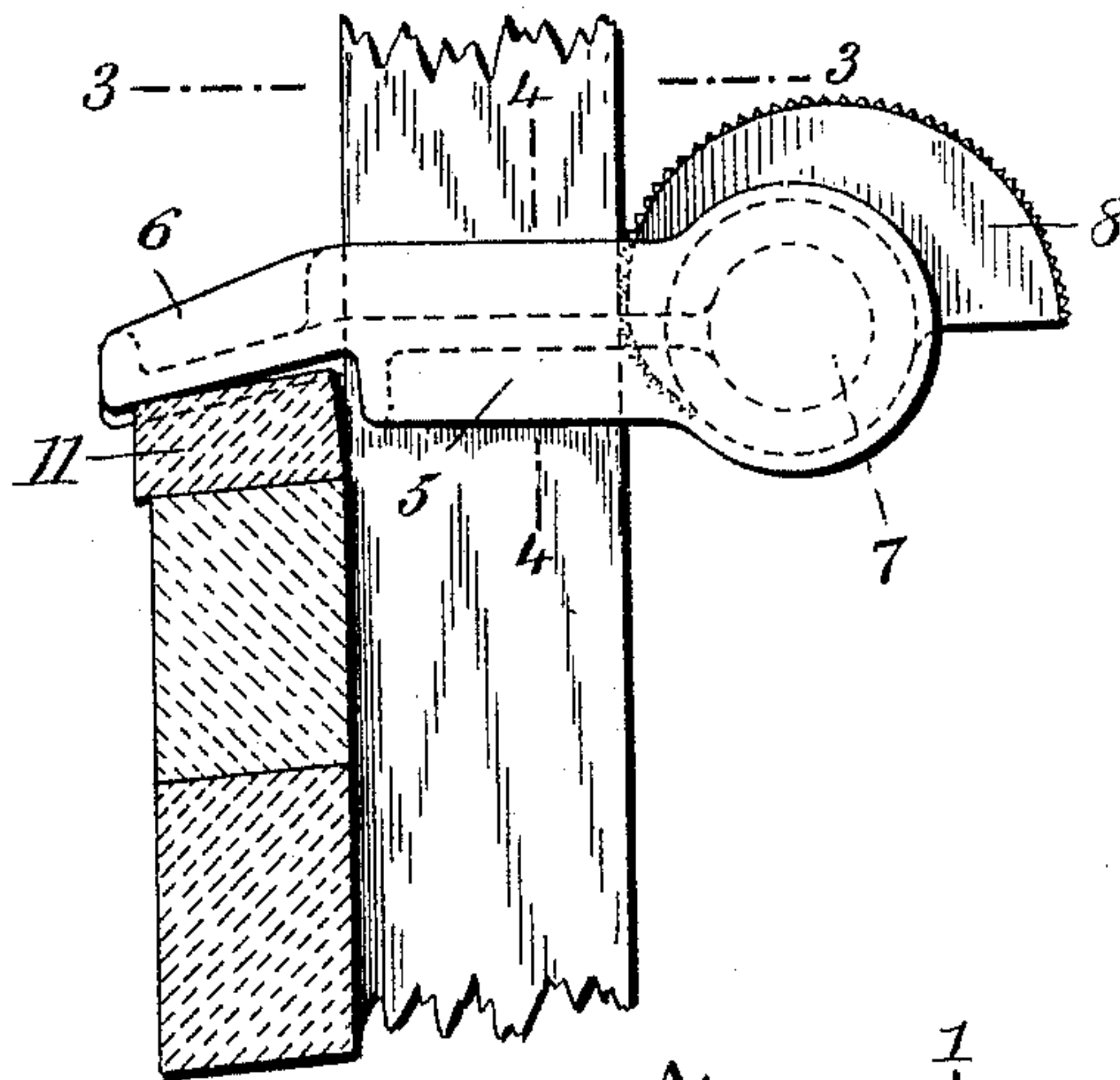


Fig. 2.

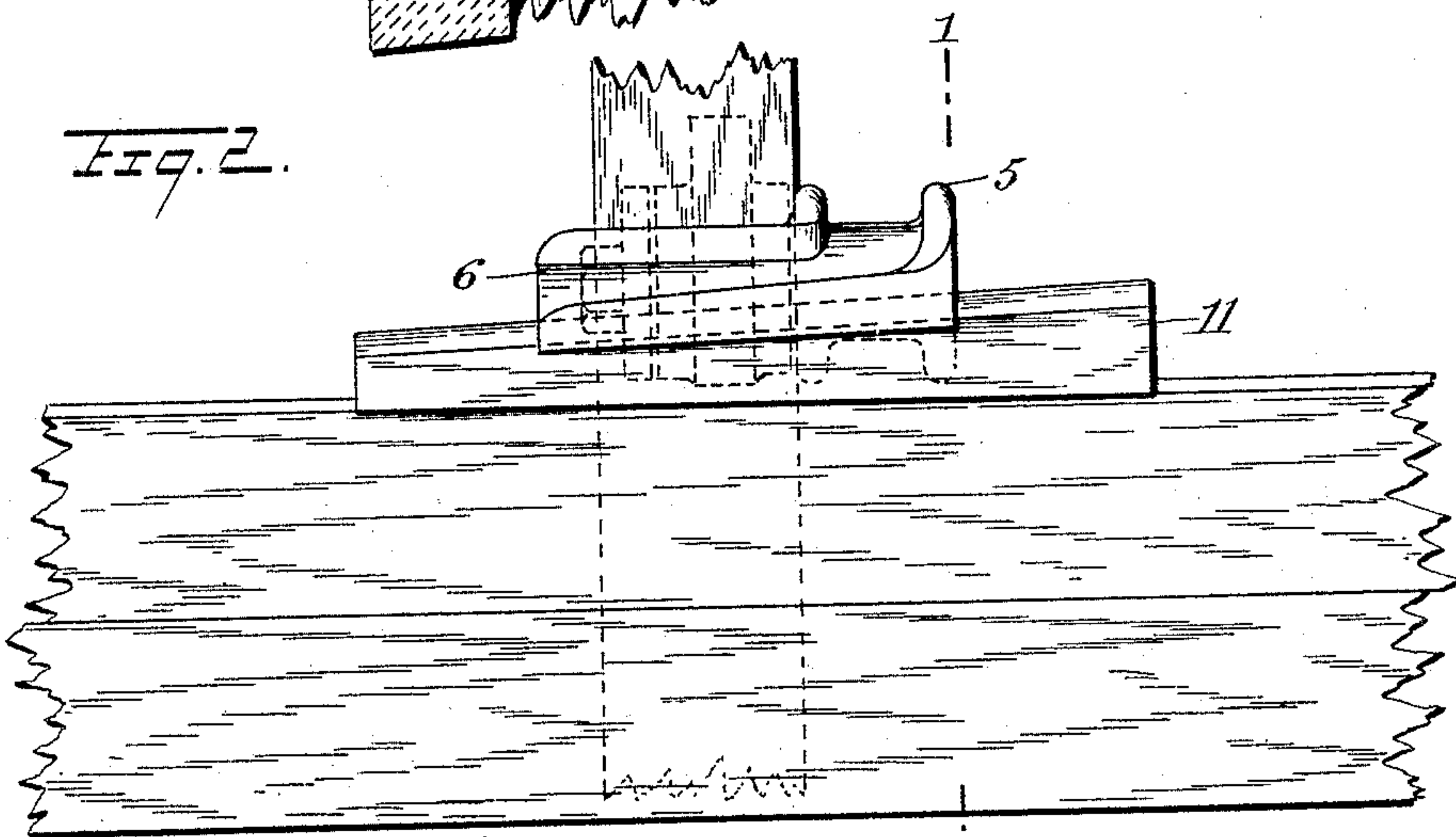


Fig. 3.

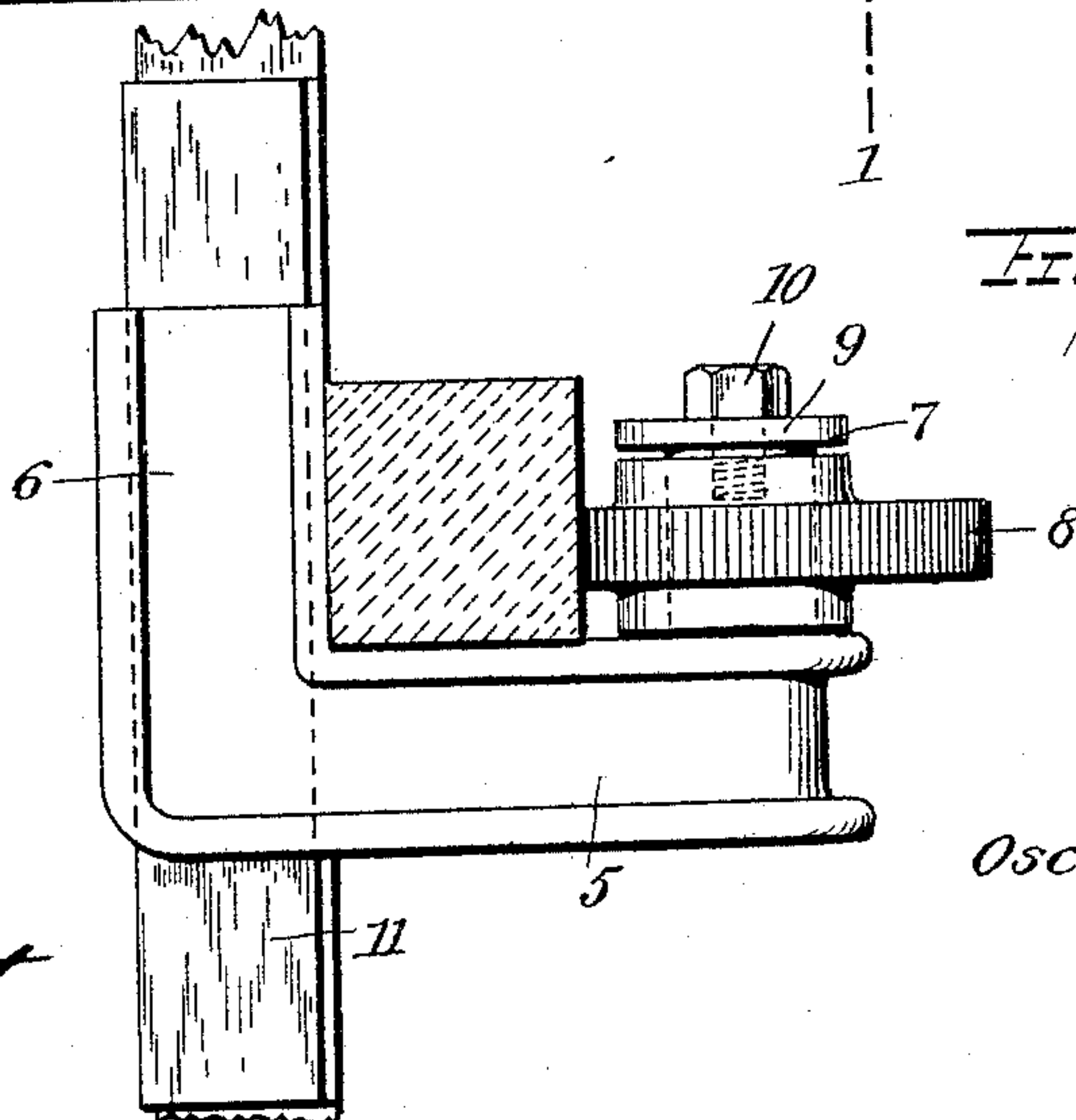
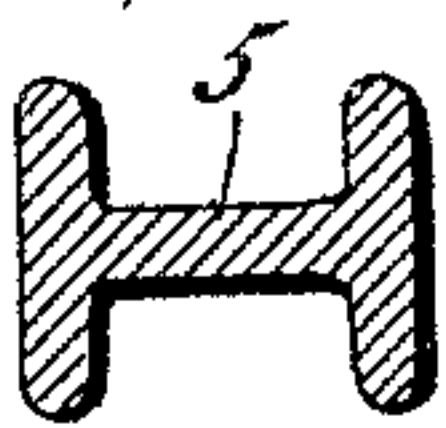


Fig. 4.



WITNESSES

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OSCAR BERTRAM PERKINS, OF GLOUCESTER, MASSACHUSETTS.

CLAMP.

No. 908,884.

Specification of Letters Patent.

Patented Jan. 5, 1909.

Application filed April 10, 1908. Serial No. 426,267.

To all whom it may concern:

Be it known that I, OSCAR B. PERKINS, a citizen of the United States, and a resident of Gloucester, in the county of Essex and State of Massachusetts, have invented a new and Improved Clamp, of which the following is a full, clear, and exact description.

This invention is an improvement in clamps, more particularly intended for boat builders in applying the hull planking.

In building the hull of a boat it is necessary to wedge each plank down firmly against the plank before applied and fastened, in order to bring their abutting edges in close contact and produce a tight seam. It has been the custom in times past in performing this wedging operation to secure a block to the boat timbers by screw-clamps, and force the plank to position by driving the wedge between it and the block. This is generally unsatisfactory, not only for the reason that much time is consumed in applying and removing the clamps, but also from the fact that times arise when the block slips even though a large number of clamps are used to hold it in place.

It is my aim to overcome these disadvantages, which I do by providing a clamp consisting of an arm having one end offset at substantially right-angles thereto, and a cam journaled on the opposite end of the arm in opposition to the offset portion and adapted to clamp the timber placed therebetween. The under face of the offset portion of the arm is both laterally and longitudinally inclined to give a good bearing surface to the wedge and tend to cause it to move inwardly and draw up the planking when it is driven in place.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the preferred embodiment of my improved clamp, illustrating it as used in connection with the planking of a boat, the latter being in section on the line 1—1 of Fig. 2; Fig. 2 is an outer side elevation of the same; Fig. 3 is a sectional plan of the clamp applied, on the line 3—3 of Fig. 1, and Fig. 4 is a cross-section through the arm, on the line 4—4 of Fig. 1.

The invention specifically described comprises an arm 5, one end of which is offset at substantially right-angles thereto as indicated at 6, to provide a jaw and the opposite

end is expanded in circular form, as shown in Fig. 1, and is provided with a laterally-projecting stud 7 on which a cam 8 is journaled in opposition to the offset portion 6. The working face or edge of the cam is preferably knurled or serrated in order to insure positive engagement of the cam with a timber placed between it and the offset portion of the arm, and cause the cam to roll and not slip. The cam is prevented from sliding from the free end of the stud 7 in any approved manner. For this purpose I have shown a washer 9 held in place by a screw 10. The body of the arm is preferably I-shaped in cross-section, as shown in Fig. 4, the under ribs of which terminate when the offset portion 6 is reached, which latter is provided with a flat under face inclining laterally and longitudinally, with the lower edge arranged at the outside, as clearly shown in Fig. 1.

In the use of the clamp in the planking of a boat's hull, it is applied to one of the timbers at the point required, by revolving the cam 8 until the same is tight; a wedge 11 is then inserted between the offset portion 6 of the arm and the plank which is being secured in place. By then driving in the wedge, the plank is forced into close contact with the plank previously applied, and at the same time drawn into the timber by reason of the tendency of the wedge to move in this direction, resulting from the lateral inclination of the offset portion of the arm. The reaction of the wedge on the offset portion of the arm will, if the clamp moves upwardly on the timber, roll the cam into tighter engagement therewith.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A clamp comprising an arm having one end offset to one side, with the under side of said offset portion inclining laterally and longitudinally with respect to the arm, and means carried at the other end of the arm for clamping a member to the inner face of said offset portion.

2. A clamp comprising an arm having one end offset to one side, the body portion of said arm being substantially I-shaped in cross-section, with the bottom flanges terminating at the offset portion, and the offset portion of the arm having a flat under face inclining laterally and longitudinally with respect to the arm, a stud projecting from the side of the arm at its opposite end and a cam

journaled on the stud in opposition to the offset portion of the arm.

3. A boat builder's clamp comprising an arm having an offset portion at one end providing a jaw, and an adjustable device carried at the other end of the arm adapted to engage a boat timber between it and the jaw, the jaw adapted to form an abutment for a wedge in forcing the planking of the boat together and drawing it to the timber,

and having its under face laterally and longitudinally inclined with respect to the arm, to conform to the wedge.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

OSCAR BERTRAM PERKINS.

Witnesses:

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